IN THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the present application:

1. (Currently Amended) A method of forming a polymeric nanocomposite material comprising:

providing a ~~nanosize material~~ carbon nanoparticle;

combining said ~~nanosize material~~ carbon nanoparticle with a solvent to form a solution mixture;

adding a polymer to said solution mixture to form a substantially homogeneous mixture~~,~~ wherein said polymer is selected from polyurethanes, ~~polyolefins, polyamides,~~ polyimides, epoxy resins, silicone resins~~, polycarbonate resins, acrylic resins,~~ or aromatic-heterocyclic rigid-rod and ladder polymers; and

removing said solvent from said mixture.

2. (Canceled)

3. (Original) The method of claim 1 in which said solvent is removed by evaporation.

4. (Original) The method of claim 1 in which said solvent is removed by coagulation.

5. (Canceled)

6. (Previously presented) The method of claim 1 in which said solvent is selected from dimethyl sulfoxide, tetrahydrofuran, acetone, methylene chloride, toluene, xylene, sulfuric acid, methanesulfonic acid, polyphosphoric acid, N,N-dimethyl acetamide, butyl acetate, or mixtures thereof.

7. (Previously presented) The method of claim 2 in which said vapor grown carbon nanofibers are selected from as-grown fibers, pyrolytically stripped fibers, or heat treated fibers.

8. (Canceled)

9. (Previously presented) The method of claim 1 including adding a dispersing agent to said solution mixture, said dispersing agent selected from oils, plasticizers, or surfactants.

10. (Original) The method of claim 1 including adding a curing agent after removing said solvent from said mixture.

11. (Previously presented) The method of claim 10 wherein said curing agent is selected from amines or metallic catalysts.

12-17. (Canceled)

18. (Currently Amended) A method of forming a polymeric nanocomposite material comprising:

providing a ~~nanosize material~~ carbon nanoparticle;

providing a polymer, wherein said polymer is selected from polyurethanes, ~~polyolefins, polyamides,~~ polyimides, epoxy resins, silicone resins, ~~polycarbonate resins, acrylic resins,~~ or aromatic-heterocyclic rigid-rod and ladder polymers;

combining said ~~nanosize material~~ carbon nanoparticle and said polymer with a solvent to form a substantially homogeneous mixture; and

removing said solvent from said mixture.

19. (Canceled)

20. (Canceled)

21. (Previously presented) The method of claim 18 in which said solvent is removed by evaporation.

22. (Previously presented) The method of claim 18 in which said solvent is removed by coagulation.

23. (Previously presented) The method of claim 18 in which said solvent is selected from dimethyl sulfoxide, tetrahydrofuran, acetone, methylene chloride, toluene, xylene, sulfuric acid, methanesulfonic acid, polyphosphoric acid, N,N-dimethyl acetamide, butyl acetate, or mixtures thereof.

24. (Previously presented) The method of claim 18 including adding a dispersing agent to said solution mixture, said dispersing agent selected from oils, plasticizers, or surfactants.

25. (Previously presented) The method of claim 18 including adding a curing agent after removing said solvent from said mixture.

26. (Previously presented) The method of claim 25 wherein said curing agent is selected from amines or metallic catalysts.

27. (Previously presented) The method of claim 18 further comprising adding a coupling agent.

28. (Previously presented) The method of claim 1 further comprising adding a coupling agent.